

Application No. 10/635,401  
Amendment dated June 23, 2005  
Reply to Office Action of February 23, 2005

### AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions and listings of claims in the application:

#### Listing of Claims:

1. (Original) A propylene-containing composition, comprising:
  - (a) at least 95 volume percent propylene;
  - (b) at least 0.5 volume percent propane;
  - (c) at least 10 vppm ethane;
  - (d) at least 1 vppm ethylene; and
  - (e) from 0.5 to 2 vppm dimethyl ether.
2. (Original) The composition of claim 1, wherein the composition further comprises:
  - (f) at least 0.05 vppm acetylene.
3. (Original) The composition of claim 2, wherein the composition further comprises:
  - (g) from 1 to 2 vppm acetylene.
4. (Original) The composition of claim 3, wherein the composition further comprises:
  - (h) from 1 to 3 vppm methyl acetylene.
5. (Original) The composition of claim 4, wherein the composition further comprises:
  - (i) from 1 to 3 vppm propadiene.
6. (Original) The composition of claim 5, wherein the composition further comprises:
  - (j) from 5 to 15 vppm C4+ hydrocarbons.

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7. (Original) The composition of claim 6, wherein the composition further comprises:  
     (k) from 0.5 to 1 vppm methanol.
8. (Original) The composition of claim 7, wherein the composition further comprises:  
     (l) from 1 to 5 vppm water.
9. (Original) The composition of claim 8, wherein the composition further comprises:  
     (m) from 5 to 20 vppm hydrogen.
10. (Original) The composition of claim 1, wherein the composition further comprises:  
     (f) at least 0.01 vppm methyl acetylene.
11. (Original) The composition of claim 1, wherein the composition further comprises:  
     (f) at least 0.01 vppm propadiene.
12. (Original) The composition of claim 1, wherein the composition further comprises:  
     (f) at least 0.02 vppm C4+ hydrocarbons.
13. (Original) The composition of claim 1, wherein the composition further comprises:  
     (f) at least 0.01 vppm methanol.
14. (Original) The composition of claim 1, wherein the composition further comprises:  
     (f) at least 0.01 vppm water.
15. (Original) The composition of claim 1, wherein the composition further comprises:  
     (f) at least 0.01 vppm hydrogen.

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16. (Original) The composition of claim 1, wherein the composition comprises from 2 to about 5 volume percent propane.
17. (Original) The composition of claim 1, wherein the composition comprises from 300 to 1000 vppm ethane.
18. (Original) The composition of claim 1, wherein the composition comprises from 5 to 15 vppm ethylene.
19. (Original) The composition of claim 1, wherein the composition comprises from 1 to 3 vppm methyl acetylene.
20. (Original) The composition of claim 1, wherein the composition comprises from 1 to 3 vppm propadiene.
21. (Original) The composition of claim 1, wherein the composition comprises from 5 to 15 vppm C4+ hydrocarbons.
22. (Original) The composition of claim 1, wherein the composition comprises from 0.5 to 2 vppm methanol.
23. (Original) The composition of claim 1, wherein the composition comprises from 1 to 5 vppm water.
24. (Original) The composition of claim 1, wherein the composition comprises from 5 to 20 vppm hydrogen.

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25. (Original) The composition of claim 1, wherein the composition comprises from 0.5 to 1 vppm dimethyl ether.
26. (Original) The composition of claim 1, wherein the composition comprises from 1 to 2 vppm dimethyl ether.
27. (Original) The composition of claim 1, wherein the composition comprises less than 0.01 vppm arsine.
28. (Original) The composition of claim 1, wherein the composition comprises less than 0.01 vppm phosphine.
29. (Original) The composition of claim 1, wherein the composition is suitable for polymerization.
30. (Original) A propylene-containing composition, comprising:
  - (a) at least 95 volume percent propylene;
  - (b) from 0.5 to about 5 volume percent propane;
  - (c) at least 0.02 vppm C4+ hydrocarbons;
  - (d) at least 0.01 vppm methanol; and
  - (e) from 0.5 vppm to 2 vppm dimethyl ether.
31. (Original) The composition of claim 30, wherein the composition comprises from 2.0 to about 5.0 volume percent propane.
32. (Original) The composition of claim 30, wherein the composition comprises from 5 to 15 vppm C4+ hydrocarbons.

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33. (Original) The composition of claim 30, wherein the composition comprises from 0.5 to 1 vppm dimethyl ether.
34. (Original) The composition of claim 30, wherein the composition comprises from 1 to 2 vppm dimethyl ether.
35. (Original) The composition of claim 30, wherein the composition comprises less than 0.01 vppm arsine.
36. (Original) The composition of claim 30, wherein the composition comprises less than 0.01 vppm phosphine.
37. (Original) The composition of claim 30, wherein the composition is suitable for polymerization.
38. (Original) A propylene-containing composition, comprising:
  - (a) at least 95 volume percent propylene;
  - (b) from 0.5 to about 5 volume percent propane;
  - (c) at least 10 vppm ethane;
  - (d) at least 0.05 vppm acetylene; and
  - (e) from 0.5 to 2 vppm dimethyl ether.
39. (Original) The composition of claim 38, wherein the composition comprises from 2.0 to about 5 volume percent propane.
40. (Original) The composition of claim 38, wherein the composition comprises from 300 to 1000 vppm ethane.

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41. (Original) The composition of claim 38, wherein the composition comprises from 1 to 2 vppm acetylene.
42. (Original) The composition of claim 38, wherein the composition comprises from 0.5 to 1 vppm dimethyl ether.
43. (Original) The composition of claim 38, wherein the composition comprises from 1 to 2 vppm dimethyl ether.
44. (Original) The composition of claim 38, wherein the composition comprises less than 0.01 vppm arsine.
45. (Original) The composition of claim 38, wherein the composition comprises less than 0.01 vppm phosphine.
46. (Original) The composition of claim 38, wherein the composition is suitable for polymerization.
47. (Original) A propylene-containing composition, comprising:
  - (a) at least 95 volume percent propylene;
  - (b) from 0.5 to about 5 volume percent propane;
  - (c) at least 10 vppm ethane;
  - (d) at least 0.02 vppm C4+ hydrocarbons; and
  - (e) from 0.5 to 2 vppm dimethyl ether.
48. (Original) The composition of claim 47, wherein the composition comprises from 2.0 to about 5 volume percent propane.

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49. (Original) The composition of claim 47, wherein the composition comprises from 300 to 1000 vppm ethane.
50. (Original) The composition of claim 47, wherein the composition comprises from 5 to 15 vppm C4+ hydrocarbons.
51. (Original) The composition of claim 47, wherein the composition comprises from 0.5 to 1 vppm dimethyl ether.
52. (Original) The composition of claim 47, wherein the composition comprises from 1 to 2 vppm dimethyl ether.
53. (Original) The composition of claim 47, wherein the composition comprises less than 0.01 vppm arsine.
54. (Original) The composition of claim 47, wherein the composition comprises less than 0.01 vppm phosphine.
55. (Original) The composition of claim 47, wherein the composition is suitable for polymerization.
56. (Original) A propylene-containing composition, comprising:
  - (a) at least 95 volume percent propylene;
  - (b) from 0.5 to about 5 volume percent propane;
  - (c) at least 0.01 vppm water;
  - (d) at least 0.01 vppm methanol; and
  - (e) from 0.5 to 2 vppm dimethyl ether.

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57. (Original) The composition of claim 56, wherein the composition comprises from 2.0 to about 5 volume percent propane.
58. (Original) The composition of claim 56, wherein the composition comprises from 1 to 5 vppm water.
59. (Original) The composition of claim 56, wherein the composition comprises from 0.5 to 1 vppm methanol.
60. (Original) The composition of claim 56, wherein the composition comprises from 0.5 to 1 vppm dimethyl ether.
61. (Original) The composition of claim 56, wherein the composition comprises from 1 to 2 vppm dimethyl ether.
62. (Original) The composition of claim 56, wherein the composition comprises less than 0.01 vppm arsine.
63. (Original) The composition of claim 56, wherein the composition comprises less than 0.01 vppm phosphine.
64. (Original) The composition of claim 56, wherein the composition is suitable for polymerization.

65 – 131 (Canceled)